RAILWAY WHEELS RESISTANT TO MARTENSITE TRANSFORMATION

ABSTRACT

Steels having a pearlitic structure and containing 0.60 to 1.0 weight percent carbon, 1.1 to 3.0 weight percent silicon, 0.45 to 0.85 weight percent manganese, less than 0.050 weight percent sulfur and less than 0.050 weight percent phosphorus, with the remainder of said steel being iron and incidental impurities, can be used to make railway wheels that are resistant to martensite transformations and, hence, spalling. The addition of 0.50 to 1.0 weight percent chromium to such steels further improves their resistance to spalling.